

## PSCI 3304: Physical Science II

**CRN:** 33877

**Term:** Summer 2020

**Time:** MTWRF 9:20 - 11:30 am

**Where:** Online Blackboard Collaborative Ultra

**Instructor:** Dr. Huiyan Yang  
Office: PSCI 215B  
Phone: 747-7510  
Email: hyang4@utep.edu  
Office Hours:

### **Required Materials:**

**Textbook:** The Physical Universe, 17<sup>th</sup> edition, by Krauskopf and Beiser. *McGraw Hill*

**Lab:** Pivot Interactives and PhET Interactive Simulations

Class key for Pivot: 4b6e7c90

**Scientific calculator is required**

### **Textbook Chapters:**

Chapter 6 Electricity and Magnetism

Chapter 7 Waves

Chapter 8 Nucleus

Chapter 9 The Atom

Chapter 10 The Periodic Law

Understanding of concepts is to be demonstrated by:

- accurately communicating them in written and verbal formats
- correctly answering both short and long answer questions
- completing hands-on activities

### **Assessment and Grading:**

Lab reports	20%
Homework	20%
Exams (3)	60%
Exercises	10% (extra)

**Lab Policy:** Lab is mandatory. There is no makeup for missed labs. The worst lab score will be dropped.

### **Homework Policy:**

Homework is assigned in Blackboard. There is no makeup of missed homework. The worst score will be dropped.

### **Exams:**

Exams are mandatory. They are given in Blackboard. No makeup exam is allowed.

### **Additional Course Policies:**

- We will have breaks and you may eat and drink (if you're careful).
- Cell phones should be turned off during class.

- When absences occur, it is your responsibility to obtain handouts and notes from your peers. You are responsible to complete the activities you have missed.

**Military:** Students being called for military duties need to contact the instructor as soon as possible.

**Academic Integrity Policy:**

Acts of academic dishonesty will not be tolerated in this class. Lapses in academic integrity will be referred to the Dean of Students, as required at <http://academics.utep.edu/Default.aspx?tabid=23785>.

**Disability Statement:**

If you have a disability and need classroom accommodations, please contact the Center for Accommodations and Support Services (CASS) at 747-5148, or by email to [cass@utep.edu](mailto:cass@utep.edu), or visit their office located in UTEP Union East Building, Room 106. For additional information, please visit the CASS website at [www.sa.utep.edu/cass](http://www.sa.utep.edu/cass).

The student is responsible for presenting to the instructor any accommodation letters and instructions.

**Tentative Timeline:**

Week	Date	Class Topic and Activity	Homework
1	Jul 7	Ch 6 Electric Charge – Lecture	Homework 1 assigned
	Jul 8	TA session and Lab <b>PhET:</b> Coulomb's Law <b>Pivot Interactives:</b> vISLE: 6) Coulomb's Law Observational experiment (Force vs Distance)	
	Jul 9	Ch 6 Electric Current – Lecture	Homework 1 due
	Jul 10	TA session and Lab <b>PhET:</b> Circuit Construction Kit: DC <b>Pivot Interactives:</b> Current & Voltage in Conductors	
2	Jul 13	Ch 6 Magnetism – Lecture	Homework 2 due
	July 14	TA session and Lab <b>Pivot Interactives:</b> Force on a Current-Carrying Conductor in a Magnetic Field (beta) <b>Pivot Interactives:</b> Vector Directions for a Current-Carrying Wire in a Magnetic Field	
	<b>July 15</b>	<b>Review for Exam 1</b> <b>Exam 1</b>	Homework 3 due
	July 16	Ch 7 Mechanical Waves – Lecture	Homework 4 assigned
	July 17	TA session and Lab <b>Pivot Interactives:</b> Exploring Properties of Transverse Mechanical Waves	
3	July 20	Ch 7 Electromagnetic Waves – Lecture	Homework 4 due
	July 21	TA session and Lab <b>PhET:</b> Bending Light <b>Pivot Interactives:</b> Angle of Refraction	
	<b>July 22</b>	<b>Review for Exam 2</b> <b>Exam 2</b>	Homework 5 due
	July 23	Ch 8 Nucleus - Lecture	Homework 6 assigned
	July 24	TA session and Lab <b>Pivot Interactives:</b> Radioactive Decay and Half Life	
4	July 27	Ch 9 Atom - Lecture	Homework 6 due
	July 28	TA session and Lab <b>Pivot Interactives:</b> Gas Emission Spectra	
	July 29	Ch 10 Periodic Table – Lecture	Homework 7 due
	July 30	TA session and Lab PhET: Build an Atom PhET: Build a Molecule	
	<b>July 31</b>	<b>Review for Exam 3</b> <b>Exam 3</b>	Homework 8 due

**Important Dates****July 9<sup>th</sup> Summer II Census Day****July 17<sup>th</sup> Summer Drop/Withdrawal Deadline**